

REMARKS

Objected To Claims

In the Office Action mailed on June 16, 2008, the Examiner stated that claims 26 and 27 were objected to as being dependent on a rejected base claim, but otherwise would be allowable if rewritten in independent form. It should be noted that claim 26 depends from claim 13, which is presently *allowed*, so claim 26 should be in appropriate form already. Moreover, claim 27 depends from claim 26, and if claim 26 is in appropriate form, then claim 27 also should be in appropriate form.

Since claims 26 and 27 currently depend from allowable base claims, Applicants respectfully submit that claims 26 and 27 should be allowable in their present form, and request the Examiner to reconsider this situation and to remove the “objected to” status of these two claims.

Rejections Based on Prior Art

Three independent claims currently stand rejected in view of prior art, i.e., claims 1, 10, and 17. All of the other independent claims are currently allowed.

In the “Detailed Action” on page 2 of the above-identified Office Action, the Examiner noted that Applicants earlier asserted that the Asano patent (US 5,793,988) did not teach “spreading” the EMI emissions to sideband frequencies. The Examiner also noted that this particular element was not reflected in the claim language.

Applicants are amending the three above-noted independent claims in a manner that essentially recites “removing electromagnetic energy from at least one center frequency of said input data signal.” For example, in claim 1 the at least one modulation pattern set has “an effect of removing electromagnetic energy from at least one center frequency of said input data signal, and generating concentrations of electromagnetic energy that are located in a controlled manner as distinct patterns at other frequencies that are to sides of said at least one center frequency on a frequency spectrum graph.”

In claim 10 there are at least two modulation pattern sets, and these have a similar effect of “removing electromagnetic energy from at least one center frequency of said input data signal, and generating concentrations of electromagnetic energy that are located in a controlled manner as distinct patterns at other frequencies that are to sides of said at least one center frequency on a frequency spectrum graph.”

Claim 17 is an apparatus claim for an electronic controller, which includes a modulating circuit. Claim 17 has been amended to state that the input data signal is manipulated in a manner that “has an effect of removing electromagnetic energy from at least one center frequency of said input data signal, and generates concentrations of electromagnetic energy emissions that are located in a controlled manner as distinct patterns at other frequencies that are to sides of said at least one center frequency on a frequency spectrum graph.”

Applicants have amended independent claims 1, 10, and 17 in a manner that essentially teaches spreading the EMI emission to sideband frequencies, and more specifically recites “removing electromagnetic energy from at least one center frequency” to “other frequencies that are to the sides” of the first center frequency on a frequency spectrum graph. The Asano patent does nothing like this; Asano essentially reduces the emissions by eliminating some of the transitions in the data signal, and only reduces the intensity of the data signal, but does not “move” the frequencies of the data signal to other frequencies in any controlled fashion. This is clear from the example of Asano presented in FIGS. 11A and 11B. In FIG. 11B (where “data modulation” is being used), the frequency spectrum looks almost exactly the same as that of FIG. 11A (where no data modulation was used), except that its “radiation field intensity” is lower in FIG. 11B. Otherwise the frequency patterns are virtually identical.

Applicants believe that the Examiner recognizes this difference between the present invention and the Asano teachings, more specifically on page 2 of the above-identified Office Action, in which the Examiner noted that some of Applicants’ assertions regarding the differences between the prior art and the present invention were not reflected in the claim language. Now these independent claims do reflect those differences, as discussed above.

In view of the amendments to claims 1, 10, and 17, Applicants respectfully submit that these claims are not rendered obvious in view of the cited prior art, and respectfully request the Examiner to pass these claims to the allowance stage.

New Claims

Applicants have added by this amendment three new claims, numbered 28-30. These claims each depend from one of the above amended independent claims; i.e., claim 28 depends from claim 1, claim 29 depends from claim 10, and claim 30 depends from claim 17.

Claims 28-30 recite subject matter relating to the present invention, specifically involving the “modulation effect” of the present invention, in which it generates concentrations of electromagnetic energy that are located at other frequencies that are “near odd-numbered harmonics of said at least one center frequency on a frequency spectrum graph.” This is an effect of the present invention that was discussed in the instant application on page 7, in the paragraph beginning on line 21.

Conclusion

Applicants have amended independent claims 1, 10, and 17 to recite certain elements that were argued in a previous amendment, and this subject matter is now explicitly recited in these three independent claims. In addition, Applicants have added three new dependent claims 28-30, which recite variations in the operations of the present invention.

Applicants have noted the Examiner’s objection to claims 26 and 27, but believe that these claims are in condition for allowance in their present form, as discussed above.

Applicants have included a fee payment paper to pay for the three additional dependent claims.

Payment of Additional Fees

Applicants are transmitting a fee payment form to pay for three additional dependent claims,

newly entered by this amendment document. The Director of Patents and Trademarks is hereby authorized to charge any underpayment or credit any overpayment of fees incurred due to this amendment to Deposit Account No. 20-0095.

Applicants respectfully request the Examiner to favorably reconsider and allow all of the pending claims.

Respectfully submitted,
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(Transmitted to the PTO via electronic filing system on September 5, 2008)

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